Digital Native Global Insurgents

Ubiquitous

Pervasive

Anonymous

Terrorist-related Web sites**
- 1997 = 12
- 2007 > 5,000

In the snow-draped mountains near Jalalabad in November 2001, as the Taliban collapsed and al Qaeda lost its Afghan sanctuary, Osama bin Laden biographer Hamid Mir watched _"every second al Qaeda member carrying a laptop computer along with a Kalashnikov"_ as they prepared to scatter into hiding and exile.**

an al Qaeda operative "no longer has to carry anything that's incriminating. He doesn't need his schematics, he doesn't need his blueprints, he doesn't need formulas." Everything is posted on the Web or "can be sent ahead by encrypted Internet, and it gets lost in the billions of messages that are out there."**

al Qaeda - the _first guerrilla movement in history to migrate from physical space to cyberspace_
- suicide bombers & ambush units in Iraq access the Web for training and tactical support
- massive and dynamic online library of training materials -- some supported by experts who answer questions on message boards or in chat rooms –
  - mix ricin poison,
  - make a bomb from commercial chemicals,
  - pose as a fisherman and sneak through Syria into Iraq,
  - shoot at a U.S. soldier,
  - navigate by the stars while running through a night-shrouded desert. **

Ubiquit...

Anonymous

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Jalalabad in
Taliban colla...
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01 May 2007

JIHAD UNSPUN

MAINSTREAM NEWS | ASK JUS | THE PLAYERS | DEPARTMENTS | NEWS ARCHIVE | ARTICLES | **UNCENSORED NEWS**
| PAGE 2 | JUS FORUM | JUS STORE | MEMBERS SIGN IN | JUS CLUB |

November 13, 2006

ARABIC TRANSLATORS WE NEED YOU!
- US Veto Backs Israel Massacre
- Mortars Weapon Of Choice In Iraq
- Germany Weighs War Crimes Charges Against Rumsfeld
- Bush To Mujahideen: Dont Look At Vote As Lack Of Will
- Brits To Quit Iraq In A Year'
- More Aussies Fly To Their Deaths
- US Offers $50,000 For Captured Soldier
- Small Blessings: Rumsfeld Quits
- US Congress Gets Kufr "Muslim"

IN THEATRE

Interview With Chechen Commander Abu Hafs: "Youth Is Going Out For Jihad"

The Islamic Chechen Republic continues its war with Russia that began long before Iraq and Afghanistan, adding to what has now become a global jihad. Vakit Newspaper sat down with Abu Hafs, a Chechen Commander to gain insight into the jihad phenomena. More...

More Martyrdom Attacks Reported By The Media Committee Of The Islamic State of Iraq

Martyrdom attacks continue to be the weapon of choice for Mujahideen fighting in defense of the newly formed Islamic State of Iraq as witnessed by reports received from the Islamic State of Iraq that detail several deadly attacks and left more soldiers dead. More...

VIDEO: Jaish Al-Islami Making A Direct Hit Completely Destroying US Tank

Here is a video clip of Jaish Al-Islami striking a US Humvee with IEDs outside of Baghdad that sends the vehicle flying through the air before it lands in pieces, upside down. Please be patient as this short but startling video downloads to your computer. More...

US Troops Murder Six Residents Of Hit; Bomb Kills three In Iraq's Anbar Province

US occupation forces raided homes in the ash-Shurtah, al-'Ummal, and al-'Askari neighborhoods of Hit, killing six local civilians, stabbing them with their bayonets in their homes in what is widely believed to avenge the killing of six American Marines on Friday. More...

VIDEO: US Soldiers Scared Stiff In Operation In Iraq's Anbar Province

Here is a rare video clip filmed inside a US patrol vehicle as they conduct an operation in Anbar Province. Rest assured these Americans wont sleep nights or choose to "stay the course" after witnessing their comrades being blown up right in front of them. More...

Carrot And Stick: Hamas Chooses "Peace Conference" Over "La Ilaha Illala"

Well it was only a matter of time before the impotent Hamas government agreed to talks with Israel following the US vetoing yet another UN resolution that condemned the latest Israeli massacre in Gaza that killed more than 50 Palestinians. More...

Be Sure To Visit The ALL NEW JUSOne Shoppe — CLICK HERE

FROM THE REGION

ARABIC TRANSLATORS WE NEED YOU!
- Blast Hits US Restaurant In Indonesia
- Lebanon Government Talks Collapse
- Iran To Arm Enemies Of Israel
- Another Assassination

BECOME A JUS PARTNER — We CAN Make A Difference

ARABIC TRANSLATORS WE NEED YOU!
- "Every Inch Of Iraq Will Be Covered With US Bodies .."
- Military Operations In Baghdad And Diyala
- Mujahideen Attacking The US Falcon Base
- Resistance Strikes Back Ramadi
- America Plans To Give Southern Iraq To Iran
- Firefight In Chechnya Leaves Fourteen Dead
- Taliban Carry Out Martyrdom Operation; U... Casualties
- The Islamic State Of Iraq Media Arm
- Video: Mujahideen Burn Supply Truck Along With US Flag

PALESTINE/ISRAEL

ARABIC TRANSLATORS WE NEED YOU!
- US Engineer Indicted Fo... Passing Secrets To Israe...
- How Israel Put Gaza Civilians In Firing Line
- Iran To Hit Back If Israel Attacks
- 48 Palestinians Dead In Zionist Assault

Ubiquit[ous]

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CRITICAL ENERGY INFRASTRUCTURE

IRAQ

IRAN

Basra Oil Terminal
various Kuwaiti oil ports
Ras Juaymah
Ras Tanura
Petroline
Ras Laffan
Abqaiq QATAR
Yanbu
★ **Riyadh**
UAE
Minal Al Fahal
OMAN
SAUDI ARABIA
YEMEN

washingtonpost.com

Saudi says oil security main topic at Riyadh meeting

Reuters
Monday, April 30, 2007; 5:15 PM

AL-EKHBARIA
EXCLUSIVE

صور من المضبوطات التي كانت في حوزة الخلايا الارهابية

abcNEWS

Saudi Militant Plot Mirrored Sept. 11

Saudi Official: Militants Held in Terror Sweep Trained to Use Planes in Suicide Missions

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01 May 2007

ists Turn to the Web as Base of Operations
Steve Coll and Susan B. Glasser
Washington Post Staff Writers
7 August 2005

Commander's Intent

"*Greater jointness and interdependence among the military services.* Fighting the Global War on Terror requires that all *instruments of national power are brought to bear on the task at hand.*"

Secretary of Defense Robert Gates

".....The technology that is at the *center of Transformation is Information Technology.*

".. a *network centric capable force is one that is robustly networked* ...., *fully interoperable* and *shares information* and collaborates *by means of a communications and information infrastructure* that is global, secure, real time, reliable, internet-based, and user-driven."

Arrival Ceremony for Former Secretary of the Army, The Honorable Francis Harvey -6 Dec 04

Department of Defense Networks

Commercial Technology Inside

Software Applications

Computing Equipment

Network Equipment

Public Network Carriers

01 May 2007

Call to Duty: Boots on the Ground

7

Department of Defense Networks

Defending the Global Information Grid

We Are Under Cyber Attack!

Cyber Intelligence Problem Sets
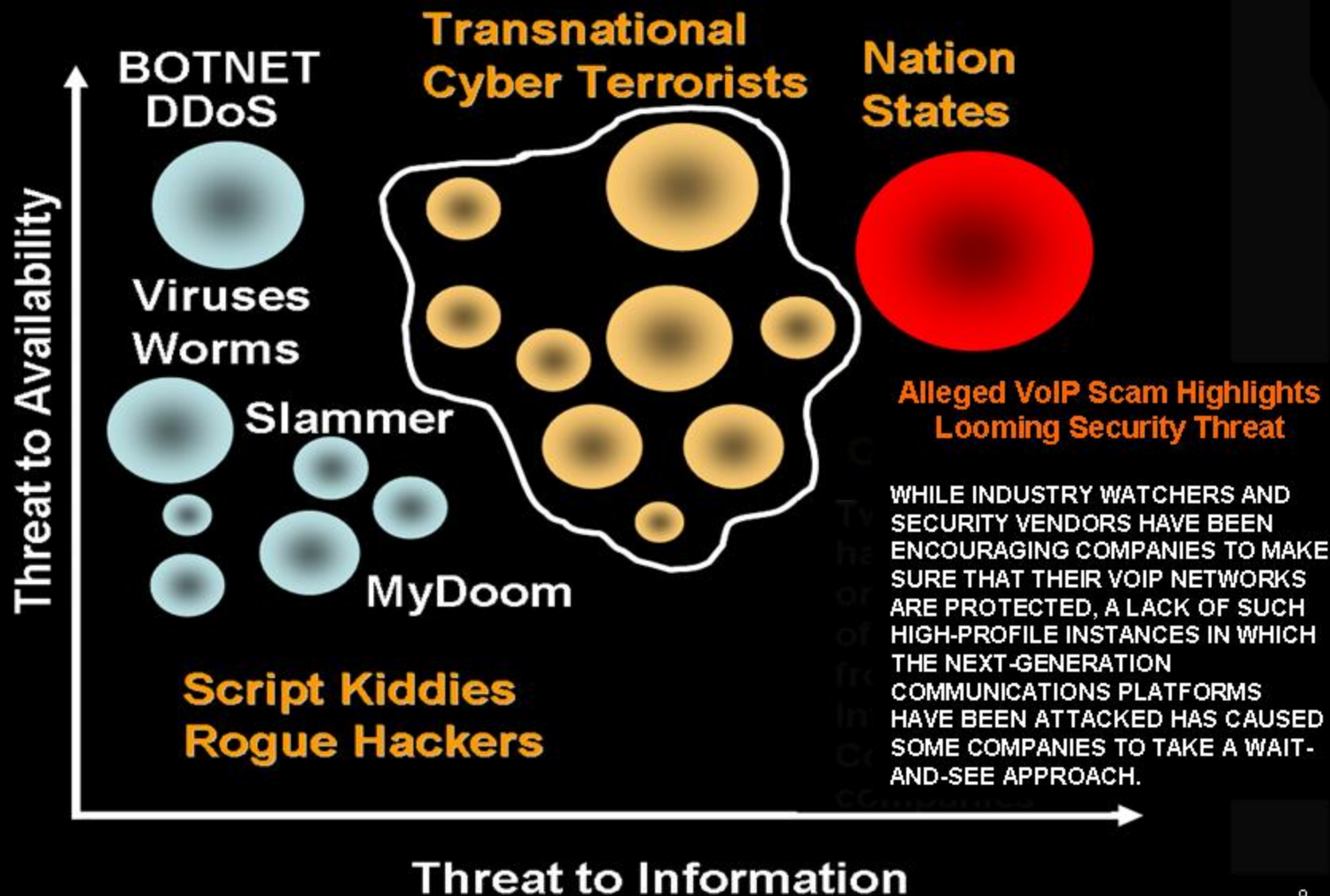
BOTNET DDoS

Transnational Cyber Terrorists

Nation States

Viruses Worms

Slammer

MyDoom

Script Kiddies Rogue Hackers

Threat to Availability

Threat to Information

Alleged VoIP Scam Highlights Looming Security Threat

WHILE INDUSTRY WATCHERS AND SECURITY VENDORS HAVE BEEN ENCOURAGING COMPANIES TO MAKE SURE THAT THEIR VOIP NETWORKS ARE PROTECTED, A LACK OF SUCH HIGH-PROFILE INSTANCES IN WHICH THE NEXT-GENERATION COMMUNICATIONS PLATFORMS HAVE BEEN ATTACKED HAS CAUSED SOME COMPANIES TO TAKE A WAIT-AND-SEE APPROACH.

01 May 2007

9

Moving to "Everything over IP (EoIP)"

- **FIRST … the Joint Special Operations Command - Fort Bragg**
- **THEN …. the Joint Communications Support Element - MacDill AFB**
  - Iraq
  - Afghanistan
- **JNN to WIN-T**

- Everything over Internet Protocol
  - Scalable
  - Flexible
  - Efficient
  - Less cost, smaller footprint, less people.
  - EoIP will converge & reduce training requirements

Current Circuit Based & Telephony Capability

Everything Over IP (EOIP) Refit

Data

Voice

Secure Networks

Converged IP

Video Teleconferencing

Unclassified Networks

JOINT COMMUNICATIONS SUPPORT ELEMENT
To address inefficiencies of traditional bandwidth allocations……..migrate everything to EoIP

Moving to "Everything over IP (EoIP)"

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Data

Voice

Secure Networks

Converged IP

Video Teleconferencing

Unclassified Networks

Airlift

JOINT COMMUNICATIONS SUPPORT ELEMENT
To address inefficiencies of traditional bandwidth allocations……..migrate everything to EoIP

Battle Command Capability Bridge
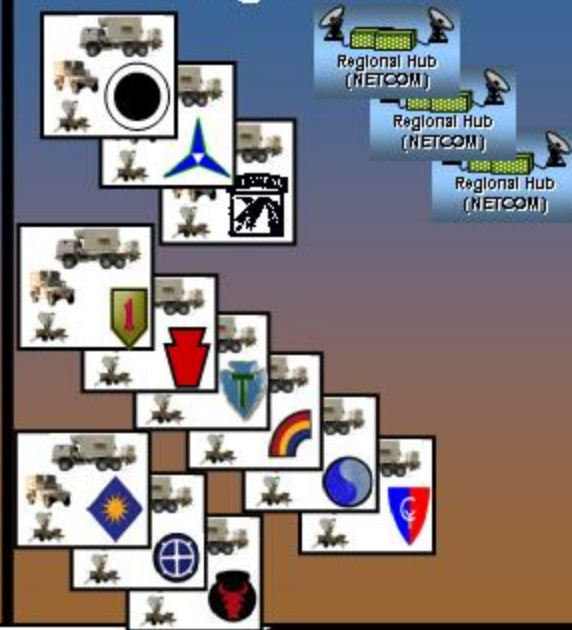## "Everything Over Internet Protocol (EOIP)"

Joint Network Node

MSE

WIN-T

FY 04

Fielded under Urgency of Need

FY 13

Programmed

"Spin-in"
- Up-armor
- Mobile Point of Presence
- Network Centric satellite modem

Soonest!!

63rd ITSB

Regional Hub (NETCOM)

Regional Hub (NETCOM)
Regional Hub (NETCOM)
Regional Hub (NETCOM)

- ITSB - Integrated Theatre Signal Battalion
- MSE - Mobile Subscriber Equipment
- WIN-T - Warfighter Information Network-Tactical

Bridging Cryptographic Modernization

Why Are We Going to HAIPE Solutions

Improved network security

Adds IPv6 functionality

Greater bandwidth efficiency

Supports foreign interoperability

using Suite B algorithms

Incorporates Common Network

Management capability

Focus on Protecting the Network and Trunk-lines

Focus on Protecting the Network and Data

FY 04

FY 13

Existing Encryption Devices

Spectera KG-235

TACLANE Classis KG-175

TACLANE E-100 KG-175

KIV 19/19A

STUIII

FPCC

NES

Programmed Refreshment

TACLANE KG-175 A-D

KG 245

KG 255

SONE KG 340

SECNET 54

Where we want to be!

• Notebook 'Drives' w/ Encryption

• High-speed Encryption Commercial Technology

• Data at Rest Encryption

• SME PED Commercial Converged to meet SIPRNet requirements

• Ease of deployment

SECURE MOBILE ENVIRONMENT (SME)
PORTABLE ELECTRONIC DEVICE (PED)

GSM **STU/STE** **B-BERRY**

SME-PED

GD **OR** L3

The primary purpose of the system is to provide a means for non-secure and secure voice and data communications over global cellular networks.

PC **ENCRYPTER** **CAC/PKI**

- Converged Secure Data and Voice Solution
- Type 1 and Non-Type 1 Capability
- Secure Data (Secret)
- SIPR-to–the-Hip
- Streaming video
- Voice (Top Secret)
- Global Connectivity (GSM and CDMA)
- Supports Strategic and Tactical Applications

GSM
CDMA

SECURE MOBILE ENVIRONMENT (SME)
PORTABLE ELECTRONIC DEVICE (PED)

GSM **STU/STE** **B-BERRY**

(** **+ **+**

The primary purpose of the system is to provide a means for non-secure and secure voice and data communications over global cellular networks.

PC **ENCRYPTER** **C**

(** **+ **+** **)**

Different Standards
China
Korea
Japan

GSM
CDMA

• Converged Secure Data and Voice Solution
• Type 1 and Non-Type 1 Capability
• Secure Data (Secret)
• SIPR-to-the-Hip
• Streaming video
• Voice (Top Secret)
• Global Connectivity (GSM and CDMA)
• Supports Strategic and Tactical Applications

Call to Duty: Boots on the Ground

SECURE MOBILE ENVIRONMENT
PORTABLE ELECTRONIC DEVICE

The SME/PED is a good start

The primary purpose of the system is to provide a means for non-secure and secure voice and data communications over global cellular networks

GSM   STU/STE   B-BERRY

(+ +)

There is No Architecture Presently to support this today!

PC   ENCRYPTER

+ +

GSM
CDMA

Secure Mobile Environment (SME)/Portable Electronic Device (PED)

- Converged Secure Data and Voice Solution
- Employs Type 1 and Non-Type 1 Capability
- Provides:
  - CAC Enabled for NIPR
  - Provides Security for Data at Rest
  - Secure Data (Secret)
    - SIPR-to–the-Hip
    - Streaming video
  - Voice (Top Secret)
    - Global Connectivity (GSM and CDMA)
- Supports Strategic and Tactical Applications

Call to Duty: Boots

The World we live in...

Total revenues for text messaging is forecast to grow to 72.5B in 2010 from 39.5B in 2005

Background

- Full 2-day workshop
- Started – 26 Aug 05
- Workshops held – 15
- Future scheduled – 6

All General Officers will attend this workshop

Purpose

- Focus on networked information systems and technologies

- Provide technical background needed to make employment and resource decisions

Attendees to date

- Former SecArmy
- 4-Star GOs – 3 (CSA, VCSA, TRADOC)
- SMA, TRADOC CSM, G-6 CSM
- Army/Army Reserve GO's – 281
- Army SES's – 15
- Other GO's – 3 (3-Navy, 2-AF, 6-Marine)
- Other SES's – 4 (1-Air Force, 3-Marine)
- Senator
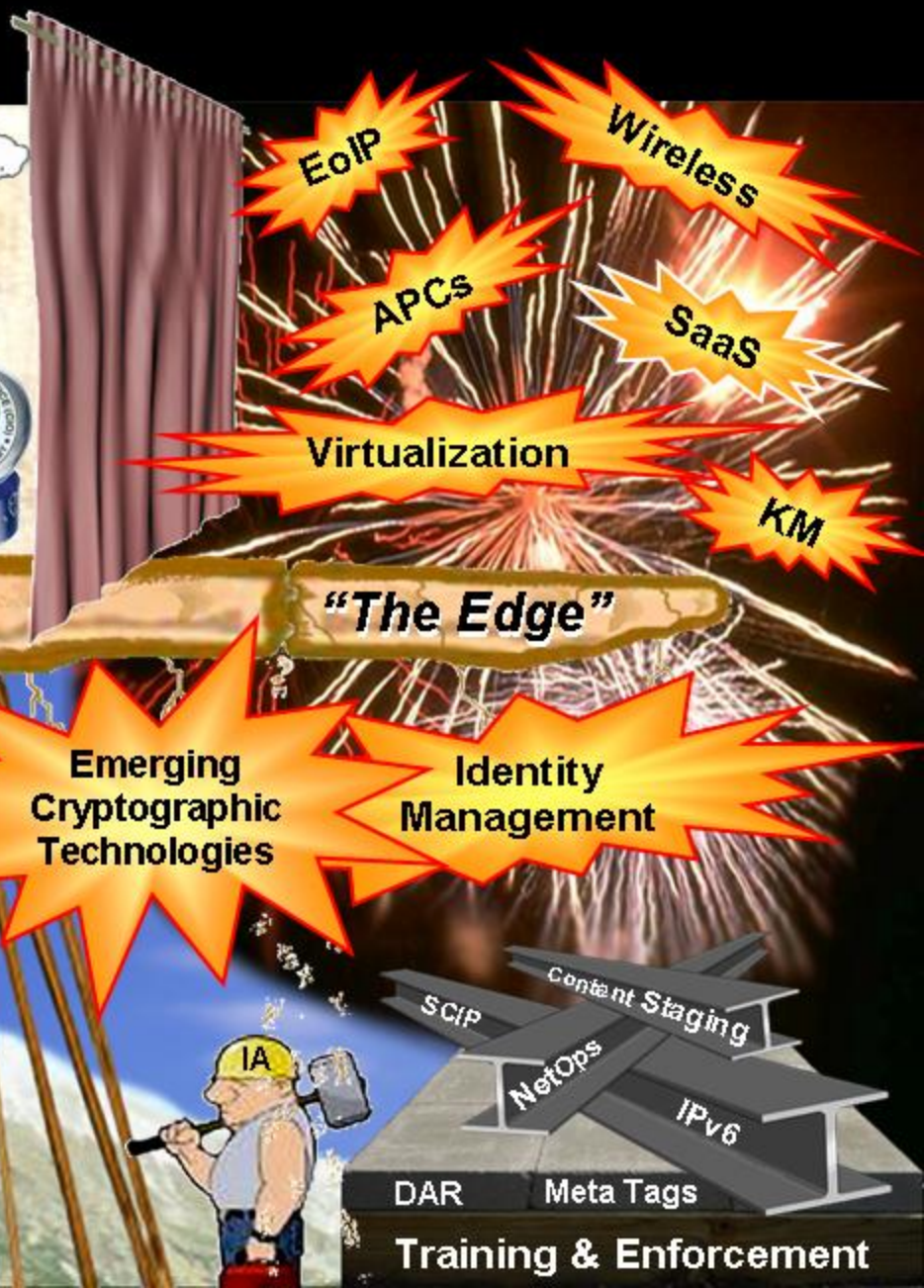- House Armed Services Committee – 2
- Congressional Staffer - 3

Discussion points

- Information Assurance
- Battle Command
- Intel Systems
- Army Knowledge Management
- Future Combat Systems
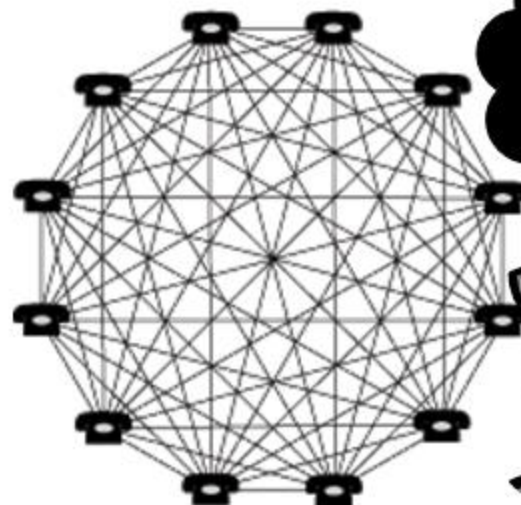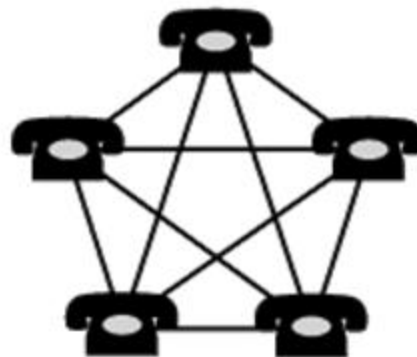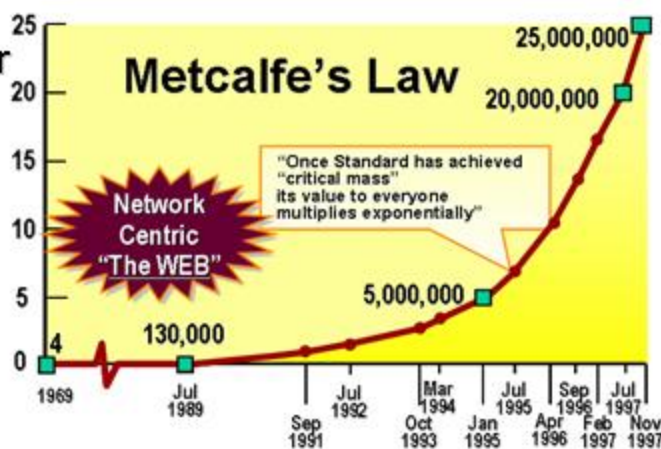
"Power to the Edge"
-- John Stenbit, former ASD NII

Network Enabled Warfare....

....or...

Metcalfe's Law
"the network effect"

"The usefulness, or utility, of a network equals the square of the number of users"

Metcalfe's Law

25,000,000
20,000,000
5,000,000
130,000
4

"Once Standard has achieved "critical mass" its value to everyone multiplies exponentially"

Network Centric "The WEB"

1969
Jul 1989
Sep 1991
Jul 1992
Oct 1993
Mar 1994
Jan 1995
Jul 1995
Apr 1996
Sep 1996
Feb 1997
Jul 1997
Nov 1997

What does this mean for the warfighter?

Generates combat power!!

QUESTIONS/THOUGHTS

LTG Steven W. Boutelle
Chief Information Officer/G-6

U.S. ARMY